IN THE CLAIMS:

In line 1, delete "~~Patent Claims~~" and insert:

C L A I M S

Please <u>add</u> new claim 13 and <u>amend</u> claims 1-12 to read as follows:

1.   (Currently Amended) A method for minimizing the error of a measured variable, particularly a signal to be measured, using filtering at variable bandwidth, <u>comprising the step of regulating</u> ~~characterized in that~~ the bandwidth ~~is regulated~~ on the basis of a physical criterion inherent to the method in such a way that signal changes not caused by noise are recognized as early as possible.

2.   (Currently Amended) The method according to Claim 1, <u>wherein</u> ~~characterized in that~~ the bandwidth is regulated in such a way that the variation of the signal ~~barely~~ does not <u>substantially</u> exceed a predefined multiple of the intrinsic noise of the measuring sensor.

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3.   (Currently Amended) The method according to Claim 2,

wherein ~~characterized in that~~ the intrinsic noise is

calculated from the known spectral noise output density of

the measuring sensor and the bandwidth of the filter.

4.   (Currently Amended) The method according to Claim 1,

wherein ~~2, or 3, characterized in that~~ the difference of the

signal from a version of the signal whose bandwidth is

delimited more strongly is observed as a variation of the

signal.

5.   (Currently Amended) The method according to ~~one of the~~

~~preceding claims, characterized in that the~~ Claim 1, wherein

a suitable filter is selected from a filter bank in the

framework of the bandwidth regulation.

6.   (Currently Amended) The method according to ~~one of~~

~~Claims 1 through 4, characterized in that~~ Claim 5, wherein

~~instead of a filter from the filter bank~~ a standardized

linear combination of at least two outputs of the filter

bank is used instead of an individual filter from the filter

bank.

7.   (Currently Amended) The method according to ~~one of the~~ ~~preceding claims, characterized in that~~ Claim 5, wherein the filter bank is a parallel circuit ~~or a series circuit~~ of filters.

8.   (Currently Amended) The method according to ~~one of the~~ ~~preceding claims, characterized in that~~ Claim 5, wherein low-pass filters are used as filters in the filter bank.

9.   (Currently Amended) The method according to ~~one of the~~ ~~preceding claims, characterized in that~~ Claim 4, wherein an absolute value of the distance of ~~the~~ an observed filter output to at least one further filter output having lower bandwidth is observed and, if the distance between the observed filter output and the output of the at least one filter having lower bandwidth falls below a threshold value, which is a predefined multiple of the intrinsic noise of the measuring sensor, the observed filter is used to display the signal~~,~~; and if the distance between the observed filter output and the output of the at least one filter having lower bandwidth exceeds a threshold value, a significant change of the information component in the signal ~~being~~ is

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recognized and a filter having at least one of higher

bandwidth ~~and/or~~ and lower response time ~~being~~ is used,

whose output is displayed.

10. (Currently Amended) The method according to Claim 9,

wherein ~~characterized in that~~ the filter which has the

lowest bandwidth of all filters whose output signals do not

exceed the threshold value is used to display the signal to

be measured.

11. (Currently Amended) The method according to Claim 9 ~~or~~

~~10~~, ~~characterized in that~~ wherein the threshold value is a

multiple of the standard deviation of the intrinsic noise of

the measuring sensor.

12. (Currently Amended) The ~~use of the~~ method according to

~~one of Claims 1 through 11 for displaying the measured~~

~~values of~~ Claim 1, further comprising the steps of receiving

the signal to be measured from a device selected from the

group consisting of strain gauges, PT100 sensors,

thermocouples, piezoresistive sensors, ~~or~~ and thermal

radiation detectors, and displaying the measured variable.

13. (New) The method according to Claim 5, wherein the filter bank is a series circuit of filters.